

PATENT
09/718,308
Docket: 093/002

AMENDMENTS

Cancel claim 29 without prejudice.

Please make the following amendments to claims 30-33, and add new claims 34-36.

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30. (Amended) A set of isolated cell populations, consisting of:
a first cell population that comprises undifferentiated cells from a line of human embryonic stem (hES) cells; and
a second cell population, wherein at least ~60% of the cells in the second population are progeny of said hES cell line, and have at least three of the following characteristics:

- antibody-detectable expression of α_1 -antitrypsin (AAT);
- antibody-detectable expression of albumin;
- absence of antibody-detectable expression of α -fetoprotein;
- RT-PCR detectable expression of asialoglycoprotein receptor (ASGR);
- evidence of glycogen storage;
- evidence of cytochrome p450 activity;
- evidence of glucose-6-phosphatase activity; or
- the morphological features of hepatocytes.

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31. (Amended) The set of claim 30, wherein at least about 60% of the cells in the second population have at least five of said characteristics.

3
32. (Amended) The set of claim 30, wherein at least about 80% of the cells in the second population have at least seven of said characteristics.

4
33. (Amended) The set of claim 30, wherein cells in the second population have been genetically altered to express telomerase at an elevated level.

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34. (New) The set of claim 30, wherein the first and second cell populations are in separate containers.

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35. (New) The set of claim 30, wherein the second cell population has been obtained by culturing progeny of the hES cell line in a medium containing a histone deacetylase inhibitor.

36. (New) The set of claim 30, wherein the second cell population has been obtained by culturing progeny of the hES cell line in a medium containing butyrate.

A version showing changes made is attached to this paper.